

# Decision-Making Marketing Strategy for Improving PLN Mobile Application Users PT. PLN (Persero) (UP3) Tanjung Karang

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## ABSTRACT

It can be seen based on existing data that the use of the PLN Mobile application is not maximal among the public; therefore, it is necessary to do the right marketing strategy to maximize the use of the PLN Mobile application at PT. PLN (Persero) UP3 Tanjung Karang considering that technology is getting more advanced from time to time. Soft System Methodology (SSM) and Analytical Hierarchy Process (AHP) are the methods used in this study with a descriptive analysis design through a qualitative approach. The factors that can maximize the increase in PLN Mobile application users are three sub-criteria from internal factors, namely Promotion, Application Infrastructure Improvement, HR, then three sub-criteria from external factors, namely Accessibility, Environmental Change, Public Relations and, four alternatives, namely Collaborating with influencers. (A person to influence decisions to others), Advertising (Making advertising in electronic media or mass media), Improving promotional programs and socializing the use of the PLN Mobile application. The most prioritized alternative for increasing PLN Mobile application users is to socialize the use of the PLN Mobile application to the public.

**Keywords:** User Increase, Decision Making, PLN Mobile Application, Analytical Hierarchy Process (AHP)

## INTRODUCTION

Information Technology (IT) is one form of technological development that has

developed in Indonesia and is a technology where its use is to process data and then it will produce conformity to information, accurate and timely for several purposes such as business needs, personal needs, and others.-other. PT PLN (Persero) is a State-Owned Enterprise (BUMN) in the electricity sector that helps the needs of people throughout the archipelago, initially improving service features by providing call center services. Over time with the advancement of technology in Indonesia, PT. PLN uses an internet-based online site, then PT. PLN launched a new application that is used via smartphones, namely PLN Mobile. Previously, PLN served customers using the PLN 123 Contact Center, PLN Web, Twitter, and Facebook which then synergized into the formation of this application. The number of uses of the PLN Mobile application, starting from April 2020 to September 2021, is shown in the trend chart below.

In 2020, the lowest number of PLN Mobile application users was in April with 4 customers and the highest number was in September with 6,272 subscribers, with a percentage increase from the previous month which was 9.261%. However, in the following month, namely October, there was a decrease to 675 users with a percentage decrease of -89% which was the largest percentage decrease in 2020. Then in 2021, the highest users were in January with

a total of 31,571 users with a percentage increase starting from last month. December 2020, which was 3.741%. However, in the following months, there was a decrease in application users for 4 consecutive months

starting from February to May. So that the lowest number of users in 2021 is 1,363 subscribers, with the accumulated percentage decline for the 4 months starting from January to May being -96%.

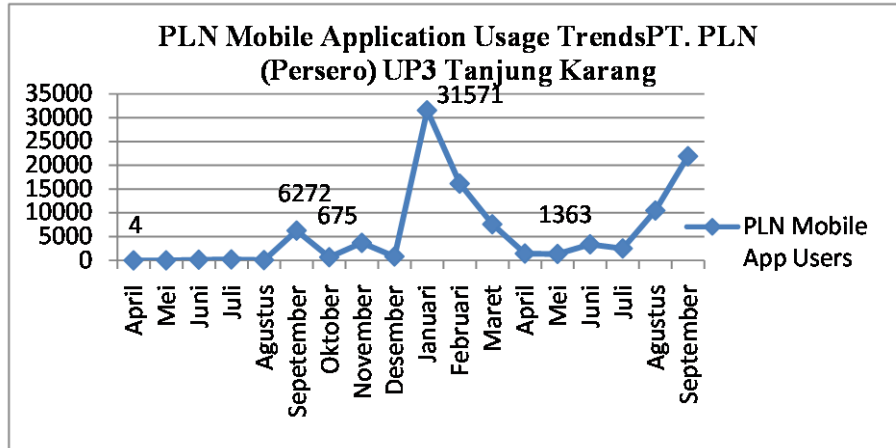


Figure 1. PLN Mobile Application User Graph at PT. PLN (Persero) UP3 Tanjung Karang

From the description of the explanation of the data on the amount of use of the PLN Mobile application above, it can be seen that the use of the PLN Mobile application is not optimal among the public, considering that technology is increasingly advanced from time to time and also now the world is facing the Covid-19 outbreak which triggers all activities and needs to be shifted to all kinds of things. online, especially people who need services at PT. PLN (Persero) UP3 Tanjung Karang. Therefore, the scheme of this study aims to manifest a suitable marketing strategy decision-making to maximize the use of the PLN Mobile application at PT. PLN (Persero) UP3 Tanjung Karang in the future.

## LITERATURE REVIEW

The process of testing existing alternatives, and relating to the wishes of a person or organization is the understanding of decision making, which is closely related to efforts to solve problems or the capacity of problems faced by a person or organization(1). Interpreting that marketing is related to knowledge about consumer needs through the formation, negotiation, exchanging of value products and services, and the development of promotions, sales, services, and prices to meet consumer needs

at a certain level(2). Various marketing activities into marketing-mix tools of four broad kinds, which he called the four Ps of marketing: Product, Price, Place, and Promotions(3).

PLN Mobile is a mobile-based customer self-service application that is connected through the Integrated Complaints and Complaints Application (APKT) and the Centralized Customer Service Application (AP2T). PLN has an official mobile application that includes information and communication services that relate between customers and PLN related to electricity services. This application also provides integrated customer data with a level of justification, accuracy, and data security that can be accounted for, and in it, several features make it easier for customers to get what they need. The following are all the features in the PLN Mobile application, namely, easy electricity payments from the application, independent meter record reporting (SwaCAM), complaints, electricity service submissions, ICONNET, and other features.

## RESEARCH METHODOLOGY

This study uses a descriptive method design through a qualitative approach. Data

collection techniques in the form of in-depth interviews or structured interviews with internal parties of PT. PLN (Persero) UP3 Tanjung Karang and PLN Mobile application users. Interviewing is a process of obtaining information for research purposes through personal questions and answers between interviewers and resource persons who are involved in relatively long social life(4). The sources who are primary data and involved in this research are as follows:

- 1 SPV Marketing PT. PLN (Persero) UP3 Tanjung Karang
- 2 SPV Customer Service PT. PLN (Persero) ULP Karang
- 3 Academic Lecturer
- 4 Three users of the PLN Mobile Application.

Then use the documentation as a technique of collecting data obtained from the company and a questionnaire, where the questionnaire is the result of interviews conducted with informants.

Soft System Methodology is the research method used, then the Analytical Hierarchy Process is used as an analytical technique in this study. SSM is a methodology in unstructured problem situations to find out goals and answer questions that determine what to do. The benefits of using SSM are as follows:

1. Increase the holistic understanding of the investigated party in the case at hand.
2. By using SSM, the learning process can be distributed to all parties involved.
3. In the process of innovation, problem-solving can be explored together, giving rise to many alternative solutions.(4)

Thomas L. Saaty developed the Analytical Hierarchy Process (AHP) which is a form of decision support that describes complex multifactorial or multicriteria problems in a hierarchy. Based on Suhud

and Dwiyanto (in Mahmudahet al., 2020), when designing a system based on the AHP decision-making method, the first step is to define the problem and set goals by arranging them in a hierarchy, then determine the criteria that will be given weight.(5)

AHP is generally used as a problem-solving method compared to other methods, due to several reasons as follows:

1. The hierarchical structure is the result of the selected criteria to the deepest sub-criteria.
2. The decision-maker selects alternatives and considers the limits of tolerance sufficient for differences between all criteria.
3. Consideration of the durability of the results of the sensitivity analysis of the decision.

The following are the stages in using the AHP method(6), namely:

1. Describe the problem, then determine the solution as expected.
2. Create a hierarchical structure starting with the first level with objectives, the second level with criteria, the third level with sub-criteria, and the fourth level with alternatives.
3. Create a pairwise comparison matrix that describes the relative contribution or impact of each element on the previous goals or criteria.
4. Interpret pairwise comparisons.
5. Determine the Intensity of Interest.
6. Estimating the eigenvalues, and testing their consistency.
7. Repeat steps 3,4, and 5 for all levels of the hierarchy.
8. Estimating the eigenvectors on each pairwise comparison matrix, which is the weight of each element.
9. Check the expected consistency ratio is less than or equal to 10%.

## **RESULTS AND DISCUSSION**

Below is a hierarchical chart that has been compiled based on detailed interviews with several sources:

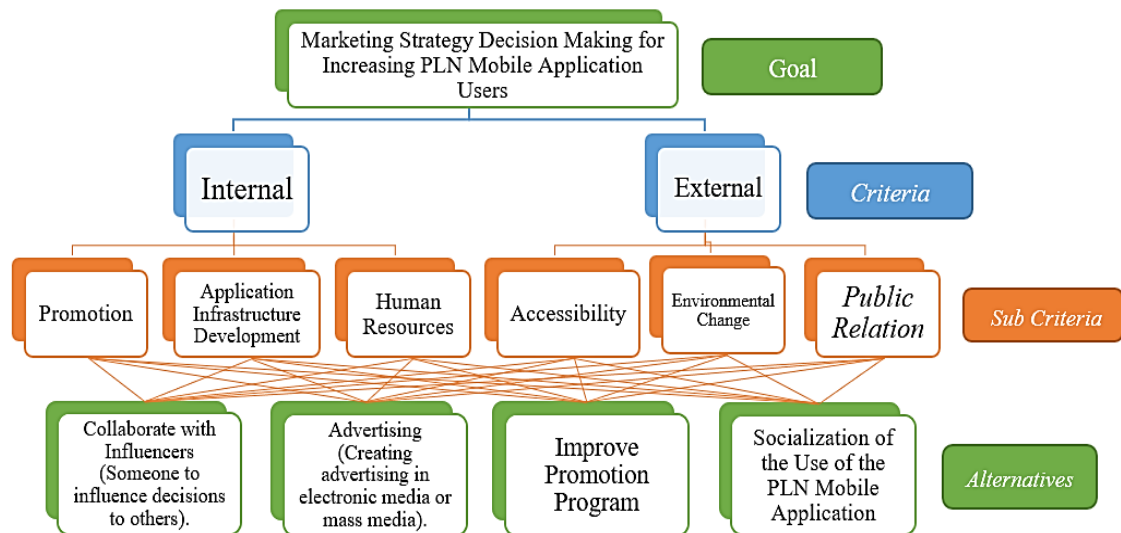


Figure 2: Analytical Hierarchy Process (AHP) Research

Based on the results of detailed interviews or structured interviews with several sources, the factors that can be used as considerations to maximize the use of the PLN Mobile application are obtained, namely, there are three (3) Hierarchy levels, one (1) Goal (goal) namely increasing the users of the PLN Mobile application. at PT. PLN (Persero) UP3 Tanjung Karang, two (2) Criteria, namely Internal and External, six (6) Sub Criteria, namely Promotion, Improvement of Application Infrastructure, Human Resources, Accessibility,

Environmental Change, Public Relations, and four (4) Alternatives namely Cooperating with Influencers (A person to influence decisions to others), Advertising (Making advertising in electronic media or mass media), Improving promotional programs and socializing the use of the PLN Mobile application.

From the 6 (six) available sources, a unification of decision-making modeling was made and the results are obtained in the table below:

Table 1 Results of Combined Questionnaire Calculation

Level 1	Level 2	Alts	Prty
<b>Percent Internal (L:465)</b>			45,8
Internal (L:465)	<b>Percent Promotion (L:174)</b>		9,6
	Promotion (L:174)	Collaborate with Influencers (Someone to influence decisions to others).	,011
	Promotion (L:174)	Advertising (Creating advertising in electronic media or mass media).	,021
	Promotion (L:174)	Improve Promotion Program.	,029
	Promotion (L:174)	Socialization of the Use of the PLN Mobile Application.	,035
	<b>Percent of Application Infrastructure Development (L:563)</b>		24,8
	Application Infrastructure Development (L:563)	Collaborate with Influencers (Someone to influence decisions to others).	,028
	Application Infrastructure Development (L:563)	Advertising (Creating advertising in electronic media or mass media).	,045
	Application Infrastructure Development (L:563)	Improve Promotion Program.	,061
	Application Infrastructure Development (L:563)	Socialization of the Use of the PLN Mobile Application.	,114
	<b>Percent of Human Resources (L:263)</b>		11,4
	Human Resources (L:263)	Collaborate with Influencers (Someone to influence decisions to others).	,014
	Human Resources (L:263)	Advertising (Creating advertising in electronic media or mass media).	,018
	Human Resources (L:263)	Improve Promotion Program.	,029
	Human Resources (L:263)	Socialization of the Use of the PLN Mobile Application.	,053

Level 1	Level 2	Alts	Prty
<b>Percent Eksternal (L:,535)</b>			54,2
External (L:,535)	<b>Percent Accessibility (L:,570)</b>		30,4
	Accessibility (L:,570)	Collaborate with Influencers (Someone to influence decisions to others).	,027
	Accessibility (L:,570)	Advertising (Creating advertising in electronic media or mass media).	,053
	Accessibility (L:,570)	Improve Promotion Program.	,091
	Accessibility (L:,570)	Socialization of the Use of the PLN Mobile Application.	,133
	<b>Percent Environmental Change (L:,214)</b>		14,4
	Environmental Change (L:,214)	Collaborate with Influencers (Someone to influence decisions to others).	,011
	Environmental Change (L:,214)	Advertising (Creating advertising in electronic media or mass media).	,033
	Environmental Change (L:,214)	Improve Promotion Program.	,050
	Environmental Change (L:,214)	Socialization of the Use of the PLN Mobile Application.	,050
	<b>Percent Public Relation (L:,216)</b>		9,4
	Public Relation (L:,216)	Collaborate with Influencers (Someone to influence decisions to others).	,010
	Public Relation (L:,216)	Advertising (Creating advertising in electronic media or mass media).	,015
	Public Relation (L:,216)	Improve Promotion Program.	,019
	Public Relation (L:,216)	Socialization of the Use of the PLN Mobile Application.	,050

Data source: Data processed by researchers in 2022  
Overall Inconsistency: 0.01

On the weighting of values by looking at the main purpose of the research, namely increasing the trend of users of the PLN Mobile application which then has

criteria and sub-criteria for each sub-criteria, then the results of the prioritized alternatives from the sources are as follows:

Table 2. Weights of Priority Alternatives for Increasing Trends in PLN Mobile Application Users

Alternative Priority Improvement of PLN Mobile Application User Trends.	Weights
Collaborate with Influencers (Someone to influence decisions to others).	0,207
Advertising (Creating advertising in electronic media or mass media).	0,105
Improve Promotion Program.	0,253
Socialization of the Use of the PLN Mobile Application.	0,436

Data source: Data processed by researchers in 2022

The following are the results of descriptive data analysis of the priority increase in the trend of PLN Mobile application users at PT. PLN (Persero) UP3 Tanjung Karang which is the most prioritized by the speakers, namely:

1. Socialization of PLN Mobile application users (0.436), is a top priority alternative that can be used by PT. PLN (Persero) UP3 Tanjung Karang to spur even more in increasing users of the PLN Mobile application. Companies can go directly to the community to explain the function of this socialization, namely as a means of introducing to the public the ease of using the PLN Mobile application, with the aim that the public knows that the existence of PLN Mobile can help the community in getting mobile-based self-

service services. In addition, socialization in the community can also help to find out how useful the application is by providing an understanding of the features available in the application. From the available features, it almost answers all customer needs, making it easier for customers to get self-service from home or remotely without having to come to the PLN service office.

2. Increasing the promotion program by (0.253), is the second priority alternative that can be used by PT. PLN (Persero) UP3 Tanjung Karang to increase users of the PLN Mobile application. One of the promotional programs from internal parties that can be carried out is by holding promotional programs in the

form of price discounts on certain services during National Electricity Day, National Customer Day, or other National holidays. However, for those who want to benefit from the promotion, customers can only transact through the PLN Mobile application. Then cooperate with external parties or third parties such as Gojek (via Gopay), Ovo, Linkaja, Dana, and other digital payment applications. administration or get a discount promo from the total amount to be paid. The strategy for maximizing sales is to increase socialization on the WO strategy and cooperate with influencers on the WO strategy(7).

3. Collaborating with influencers (someone to influence the decisions of others) of (0.207), is the third alternative that can be used by PT. PLN (Persero) UP3 Tanjung Karang to increase users of the PLN Mobile application, where the use of influencers is one method of promotion that is also fairly efficient because, in today's developments, everyone who is considered an influencer or can influence someone's decision can target a niche. which is aimed. Companies can collaborate with influencers in the work area to introduce the PLN Mobile application to their followers through the influencer's social media channels who have a large number of followers or followers.
4. Advertising (making advertising in electronic media or mass media) of (0.105), is the last alternative that can be used by PT. PLN (Persero) UP3 Tanjung Karang to increase users of the PLN Mobile application. Companies can make creative and innovative advertisements following what is trending among the public, then displayed them on several social media that are widely used by the wider community, such as Instagram, Tiktok, Facebook, and other social media. By displaying videos with short durations that have been summarized to be more

informative or posting paid pamphlets that will automatically become highlights for people's accounts who are accessing the social media mentioned above.

## **CONCLUSION**

Based on the research results obtained to determine the decision-making marketing strategy to increase users of the PLN Mobile application at PT. PLN (Persero) UP3 Tanjung Karang using the Analytical Hierarchy Process (AHP) research method and processed using the Expert Choice application, the following conclusions were obtained:

1. Marketing strategy in increasing PLN Mobile application users that can be done by PT. PLN (Persero) UP3 Tanjung Karang, namely:
  - Internal Criteria, namely Promotion, Development of Application Infrastructure, and Human Resources.
  - External Criteria, namely Accessibility, Environmental Change, and Public Relations.
2. The alternative marketing strategy that can be used by PT. PLN (Persero) UP3 Tanjung Karang, namely:
  - Socialization of the use of the PLN Mobile application.
  - Improve Promotion Program.
  - Collaborate with Influencers (Someone to influence the decisions of others).
  - Advertising (Making advertising in electronic media or mass media).
3. The most preferred alternative in the marketing strategy is an effort to increase users of the PLN Mobile application at PT. PLN (Persero) UP3 Tanjung Karang is to socialize the use of the PLN Mobile application.

## **SUGESSTIONS**

The suggestions that the researcher conveys are following the conclusions and alternative priorities that can be done by PT. PLN (Persero) UP3 Tanjung Karang in the form of socializing the use of the PLN

Mobile application. However, because it coincides with the Covid-19 virus pandemic, the company can accompany these activities by innovating to deliver socialization to the public. By doing socialization online using a supporting application which is then connected to live streaming on the YouTube channel, and this activity is disseminated through social media owned by the company. So that the number of participants who take part in this socialization is not limited or the entire community can take part in socialization activities regarding the use of the PLN Mobile application. Then to attract people's attention, door prizes are provided in the form of electric token vouchers or electronic devices for lucky participants. That way, this priority alternative program can still run according to the goals and expectations.

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## REFERENCES

1. Barusman, M. Y. S. Soft Systems Methodology Solutions For Management Complexity. 2017.
2. Barusman, M. Y., Citra, A., Oktavianur, M., & Redaputri, A. Decision Making on the Placement of State Civil Apparatus (ASN) Structural Positions. *Journal of Business and Management Applications*. 2020. <https://doi.org/10.17358/jabm.6.3.459>
3. Maheasy, M., Baga, L. M., & Amanah, S. Policy Strategy To Increase The Number Of Students In Decided To Choose A Postgraduate Program In The Department Of Es1 Fem Ipb. *Journal of Business and Management Applications*. 2020. <https://doi.org/10.17358/jabm.6.1.154>
4. Manik, S., & Rianti, B. The Effect Of The Marketing Mix On The Purchase Decision Of Vegetable Ice Cream Broco Ice Cream In Pekanbaru. *Journal of Management and Business*. 2019. 8(1), 162-175. <https://doi.org/10.34006/jmbi.v8i1.104>
5. Muhdi, M., Kastawi, N. S., & Widodo, S. Decision Making Techniques in Determining the Secondary Education Management Model. *Manage: Journal of Educational Management*. 2017. 4(2), 135. <https://doi.org/10.24246/j.jk.2017.v4.i2.p135-145>
6. Prihartono, Y., & Magdalena, H. Application of the Analytical Hierarchy Process (AHP) Method as Decision Support in Determining the Best Internet Service Provider in Pangkalpinang. *Journal of Sisfokom (Information Systems and Computers)*. 2016. 5(1), 21-32. <https://doi.org/10.32736/sisfokom.v5i1.195>
7. Redaputri, A. P., & Suganda, D. Business Strategy Analysis Of Business Kemplang Panggang Fajar Bandar Lampung [Preprint]. *Open Science Framework*. 2021. <https://doi.org/10.31219/osf.io/76tmc>
8. SYAHRA, A. Entrepreneurship paper. 2021.

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